

CLAIMS

1. A resin composition for a foam comprising:
a branched rubbery olefin based soft resin (C)
5 obtained by a kneading reaction of an organic peroxide crosslinking type olefin based copolymer rubber (A) and an organic peroxide decomposing type crystalline olefin resin (B),
wherein a gel fraction (a weight percentage of an
10 insoluble content after extraction with xylene boiled at 138°C for 3 hours) of the branched rubbery olefin based soft resin (C) is less than 5%.

2. The resin composition for the foam according to claim
15 1, wherein a volume ratio of a component which exhibits a mobility of 400 microseconds or more at a T_2 (spin-spin relaxation) time by proton (H^+) pulse nuclear magnetic resonance is 55 to 95% and a volume ratio of a component which exhibits the mobility of less than 400 microseconds
20 at the T_2 time is 5 to 45% in the branched rubbery olefin based soft resin (C).

3. A foam obtained by foaming a branched rubbery olefin based soft resin (C) obtained by a kneading reaction of an
25 organic peroxide crosslinking type olefin based copolymer rubber (A) and an organic peroxide decomposing type crystalline olefin resin (B),
wherein a gel fraction (a weight percentage of an insoluble content after extraction with xylene boiled at
30 138°C for 3 hours) of the branched rubbery olefin based soft resin (C) is less than 5%.

4. The foam according to claim 3, wherein a volume ratio

of a component which exhibits a mobility of 400 microseconds or more at a T_2 (spin-spin relaxation) time by proton (H^+) pulse nuclear magnetic resonance is 30 to 95% and a volume ratio of a component which exhibits the mobility of less than 400 microseconds at the T_2 time is 5 to 70% in the branched rubbery olefin based soft resin (C).

5. A method for producing a foam comprising:
a step of preparing a branched rubbery olefin based soft resin (C) wherein its gel fraction (a weight percentage of an insoluble content after extraction with xylene boiled at 138°C for 3 hours) is less than 5%, by kneading and reacting to thicken an organic peroxide crosslinking type olefin based copolymer rubber (A) and an organic peroxide decomposing type crystalline olefin resin (B) in the presence of an organic peroxide; and
a step of foaming the branched rubbery olefin based soft resin (C).

20 6. A method for producing a foam comprising:
a step of preparing a branched rubbery olefin based soft resin (C) wherein a volume ratio of a component which exhibits a mobility of 400 microseconds or more at a T_2 (spin-spin relaxation) time by proton (H^+) pulse nuclear magnetic resonance is 30 to 95% and a volume ratio of a component which exhibits the mobility of less than 400 microseconds at the T_2 time is 5 to 70%, by kneading and reacting to thicken an organic peroxide crosslinking type olefin based copolymer rubber (A) and an organic peroxide decomposing type crystalline olefin resin (B) in the presence of an organic peroxide; and
a step of foaming the branched rubbery olefin based soft resin (C).